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1           A    And my answer was: I think not.

2                   I think what I would have done is I would have  
3 checked and probably -- you know, and I'm just  
4 speculating -- same way Dr. Christensen found these  
5 errors, I would have found errors as well.

6           Q    When he submitted this study in May 1994, he  
7 had not found these errors; isn't that right?

8           A    I don't know, but think that's correct.

9           Q    Capital inputs: We talked about that a few  
10 moments ago; right?

11          A    Okay.

12          Q    I wasn't clear on what you were saying.

13                   Did you agree that you compare changes in  
14 capital stock over a defined period of time as part of a  
15 productivity study?

16          A    Changes in capital stock.

17                   I guess if -- now, it does matter whether  
18 you're doing a monthly or an annual or a five-year kind  
19 of study.

20                   If the capital stock is fixed, say, during a  
21 period, or can be treated as being fixed during that  
22 period, you could look at changes in the capital stock,  
23 but you have to be very careful about saying that.   ]

24                   I prefer to think of capital as physical items  
25 and then ask the question can you aggregate these up to  
26 monetary items. So can you use their values deflated in  
27 some way to stand for them.

28                   The measurement of capital is a tough one, is

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1 a tough problem.

2 If you're looking at a longer run situation  
3 where capital can be viewed as variable, then you would  
4 use the costs of capital, or the prices of capital.

5 Q Were you here when Dr. Christensen testified  
6 last Wednesday?

7 A In and out.

8 Q Do you recall my discussion with him about  
9 reproduction costs of capital inputs?

10 A No.

11 Q Do you know what the term reproduction costs  
12 means?

13 A I can think of a definition, but why don't you  
14 tell me what you mean? No?

15 Q I'm just asking you if you know what it  
16 means.

17 A I can think of a definition.

18 Q Would you give us what your definition is of  
19 the term?

20 A Of reproduction costs of capital? Would be  
21 the costs of buying, on a competitive market, a piece of  
22 capital that would reproduce the functionality, if you  
23 will, of a given other piece of capital that's currently  
24 in your portfolio capital.

25 Q Dr. Christensen, in response to several of my  
26 questions, first stated that in his TFP study the  
27 comparison of changes in capital stock had not looked at  
28 reproduction costs, but then after a break came back and

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1 told me that in fact he had looked at reproduction  
2 costs.

3 Are you aware of that?

4 A I know there was some question about whether  
5 he had used reproduction costs or not, because we looked  
6 to see what we were using.

7 We were using reproduction costs.

8 Q In determining reproduction costs of a capital  
9 stock base, you have to make certain assumptions, don't  
10 you?

11 A Yes.

12 Q What types of assumptions might you have to  
13 make in analyzing reproduction costs?

14 A What kind of capital are we talking about?

15 Q Well, local exchange company capital.

16 A Specifically what? The switch --

17 Q Physical equipment that a local exchange  
18 company uses to provide telecommunications services.

19 A What assumptions would one have to make?

20 Q Well, for example, if this isn't clear enough,  
21 would you have to decide whether to replace your  
22 existing capital stock at current prices or replace it  
23 with current technology?

24 A If you're taking the long-run approach that  
25 I'm talking about, you would simply use the current  
26 reproduction prices of capital that would have  
27 reproduced that functionality.

28 Q That means, just to be clear, that you would

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1 determine what the current market price is of the  
2 existing capital, and that would be the current  
3 reproduction price?

4 A On the margin. On the margin. These are for  
5 marginal changes.

6 Q But assuming that we're talking about on the  
7 margin, that's correct, is it not?

8 A Well, no, you don't go back and replace your  
9 whole -- what you want to know is the -- your  
10 productivity, your production, if you will, has changed  
11 and your production has changed because the output  
12 levels have changed and the input levels have changed  
13 and the technology has changed.

14 Now, these input levels have changed a little  
15 bit, and they're changed because you dropped out some  
16 old capital, and you put in some new capital, and so .  
17 presumably your net adds are all going to be new.

18 And so it would be just for that net increment  
19 that you added that contributed to the change in  
20 production, because presumably the old capital is still  
21 chugging along doing whatever it's doing. So it's only  
22 that little increment that you should be worried about.

23 So I would use the current prices for that  
24 little increment that you just purchased.

25 Q If somebody performed the analysis that  
26 generated the reproduction costs for you and provided  
27 you with those reproduction costs, would you want to  
28 know what method they had used to calculate the

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1 reproduction costs?

2 A Yes.

3 Q You would ask them that, wouldn't you?

4 A I would probably say I want reproduction  
5 costs -- I want to know what it would cost to do the  
6 following, okay, and I would expect that they would find  
7 that information the way I asked them to.

8 Q So you would specify the methodology?

9 A Yeah, I would probably specify the  
10 methodology, and I might have to talk to them a bit.  
11 I might say, well, I wanted it this way, and  
12 they'd say, well, that's not the way you find out these  
13 things.

14 So after trying to get a common opinion of how  
15 to get at these particular kinds of information, then I  
16 would say, okay, everybody -- you know, this is assuming  
17 that we're working with a large number of companies --  
18 okay, can you provide me the data in this fashion, and  
19 if they can, then fine.

20 Q If you had the seven RBOCs as the basis of  
21 your study, you would ask this question or specify this  
22 methodology to each of them, is that right?

23 A Yes. Or I might try and figure out a priori  
24 if it was possible to get at the information without  
25 bothering them at all.

26 Q Would it be important to you that the same  
27 methodology be used consistently across each of the  
28 RBOCs in calculating reproduction costs?

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1           A   No. But that's a qualified no. If they're  
2 grossly different measurements, okay, you're going to  
3 run into problems.

4           If they're slightly different -- remember, all  
5 of these methods we're using take into account that  
6 there are errors, there are errors in the data, okay,  
7 there are flaws in the design, and the methods that we  
8 use are designed to guard against those things.

9           So, yes, you know, it is important that people  
10 try to be as consistent as possible, okay.

11           But if they are not truly consistent, the  
12 methods that we use have taken that into account, and we  
13 know that there are errors, okay, and so we use  
14 statistical techniques.

15           That's why you don't just look at one  
16 observation; that's why you look at many things. That's  
17 why you don't just look at one company. You look at an  
18 ensemble and see what happens there.

19           So I would like it if they were consistent.  
20 But if you mean do they do precisely everything the  
21 same, no. No, I don't require that.

22           I don't expect that, and it doesn't happen.

23           MR. FABER: Your Honor, I am nearing the end of my  
24 questions, but I might take another 10 or 15 minutes.

25           Would you prefer to take a break and then let  
26 me finish?

27           ALJ REED: If you don't mind, why don't we just  
28 take a little break now.

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1 MR. FABER: That's fine.

2 ALJ REED: Let's come back at five of.

3 (Recess taken)

4 ALJ REED: On the record.

5 Mr. Faber.

6 MR. FABER: Thank you, your Honor.

7 Q Dr. Duncan, I was asking you a few questions.  
8 about reproduction costs before we broke, and understand  
9 that you would like it if the assumptions used by the  
10 seven RBOCs were consistent, but it wasn't absolutely  
11 essential, is that right?

12 A That's correct.

13 Q Did you make any effort to determine whether  
14 the assumptions used by the RBOCs in Dr. Christensen's  
15 study in calculating reproduction costs were consistent?

16 A No, I took them at face value, that in fact  
17 they were consistent enough for this kind of analysis.

18 You know, understand, this is -- this  
19 methodology is relatively robust to small changes in the  
20 data. So if you have small changes because of small  
21 inconsistencies, it's probably not going to change the  
22 number too much.

23 So I assumed that, in a broad brush sort of  
24 way, that the reporting methodology is the same.

25 Q Did you make any effort to examine  
26 specifically any of the data underlying  
27 Dr. Christensen's study?

28 A No, I did not.

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1       Q   When Dr. Christensen submitted his revisions  
2   in January of 1995, the update that he attaches to his  
3   testimony -- no, let me strike that and start over.  
4   That wasn't a well-phrased start.

5       You told us earlier that you were aware that  
6   Dr. Christensen had submitted a study to the FCC in May  
7   1994, is that right?

8       A   I was aware that he had submitted a study.  
9       I don't know when I was, you know, aware of  
10   that.

11      Q   Were you aware of the existence of that study  
12   prior to the time that he updated it in January of this  
13   year?

14      A   I believe I was.

15      Q   You were following Docket 94-1 at the FCC to  
16   some extent, is that right?

17      A   I wouldn't say I was following it.

18       Just as a matter of course, keeping track of  
19   what's happening with productivity throughout the  
20   industry.

21       So if something comes up, naturally I would  
22   note that it was there for future reference.

23      Q   Is it correct that you learned about the 19 --  
24   the January 1995 update after it was submitted to the  
25   FCC?

26      A   Yes, I would say it was probably -- it was  
27   almost certainly after it was submitted.

28      Q   Prior, then, to January of 1995, did you have



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1 any knowledge that a number of the items of data  
2 reported to Dr. Christensen and used in the May 1994  
3 study were inaccurate?

4 A No, I had no --

5 Q You mentioned, I think earlier that before  
6 last week you had never met or talked to  
7 Dr. Christensen, is that right?

8 A That's -- that may be inaccurate.

9 It may be the case that we met, like 1978,  
10 when I was an assistant professor at Northwestern and he  
11 gave a talk.

12 But I mean it was one of those things where I  
13 vaguely remember I might have been in a seminar he  
14 gave. But that's as close as we've ever been.

15 Q He had two co-authors on his FCC study named  
16 Schoech and Meitzen.

17 Do you know either of those gentlemen?

18 A No, I do not.

19 Q Have you ever spoken to either of them?

20 A No. No.

21 Q So you never spoke to anyone at Christensen  
22 Associates about whether they had checked the  
23 accuracy --

24 A Nope --

25 Q -- of the data used in his study?

26 A No, I did not.

27 Q Now, if you were presenting a study to the  
28 CPUC like we've been discussing, a study of the total

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1 factor productivity of the RBOCs --

2 A Okay.

3 Q -- would you expect the CPUC to simply accept  
4 your results at face value?

5 A I would hope they would, yes.

6 Q Do you believe that your submission to the  
7 CPUC should contain sufficient underlying data to allow  
8 the CPUC to replicate your study?

9 A I guess I would think that's a matter of  
10 style.

11 I could imagine including everything and  
12 having humongous reports for people to wade through, or  
13 to present an executive summary, and it's my opinion  
14 that, unlike academics, Commissions are much more like  
15 firms and prefer simple executive summaries, and if they  
16 want any more information they'll ask for it.

17 So I guess, if I were doing it myself, I would  
18 present something simple with the highlights, and I  
19 wouldn't produce everything, whereas, you know, in an  
20 academic situation you might put the details of the  
21 calculations, and that sort of thing, in the  
22 background.

23 I don't think anyone ever shows the data,  
24 though.

25 Q Are you aware that last Wednesday the FCC  
26 issued a new Notice of Proposed Rulemaking in Docket  
27 94-1?

28 A Nope.

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1       Q   Were you aware that the FCC was going to be  
2 seeking further comments on establishing a mechanism for  
3 calculating rates under its price cap rules?

4       A   No, I was not.

5       Q   I have a copy of it here. I want to read to  
6 you a particular statement by the FCC and get your  
7 reaction to it.

8           In this order, dated September the 27th, 1995  
9 the FCC says the following:

10            "In the first report and order,  
11           several parties supported their  
12           position on the X factor with one or  
13           more statistical studies purporting  
14           to measure trends in LEC  
15           productivity or unit costs.

16            "In this phase of this  
17           proceeding, any party submitting  
18           studies, proposed methods for  
19           calculating an X factor, or other  
20           empirical information must furnish  
21           promptly, upon request by Commission  
22           staff or any party to this  
23           proceeding, workpapers and any other  
24           data necessary to replicate the  
25           results submitted in this  
26           proceeding.

27            "If a party fails to do so, we  
28           will accord no weight to those

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1 studies, methods, or empirical  
2 information in our deliberations."

3 Now, do I take it from the answers you just  
4 gave me that you do not believe that is an appropriate  
5 standard for a government regulatory body to apply in  
6 evaluating productivity studies and calculation of the X  
7 factor in a price cap formula?

8 MR. SASSER: Your Honor, I'm going to object to the  
9 question. There's a lack of foundation here.

10 The witness said he didn't know anything about  
11 the decision, he didn't know -- he hadn't read it, he  
12 was not familiar with it, and then what we have is  
13 Mr. Faber reading excerpts from it into the record and  
14 then asking him to react to it.

15 I don't think that's fair. The witness is not  
16 competent to testify as to what is in that decision. ]

17 MR. FABER: Your Honor, I am asking the witness to  
18 assume that the decision is as I read it. I will be  
19 happy to have it marked as an exhibit if Mr. Sasser  
20 insists, but the witness did testify that it's his  
21 belief as to the fact that Commissions like to get  
22 executive summaries and not to see the underlying data.

23 And all I'm asking now if he therefore  
24 believes that the FCC statement -- that it will accord  
25 no weight when that type of material is submitted --  
26 should it be an appropriate standard for regulatory  
27 biennial reviews. It follows directly from the answer  
28 that he gave.

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1 I don't see the need to mark this hundred-page  
2 document as an exhibit just to satisfy Mr. Sasser's  
3 concern about whether it is accurate or not.

4 MR. SASSER: That certainly wouldn't satisfy my  
5 concern. My concern doesn't go to the accuracy of your  
6 quote. My concern goes to asking the witness questions  
7 about a document that he's not familiar with.

8 MR. FABER: I'm happy to let him review it if you  
9 like.

10 MR. GOLABEK: I would just object to Mr. Faber's  
11 characterization there of Dr. Duncan's testimony. I  
12 believe he said they preferred an executive summary. If  
13 the Commission wants more information, they would ask  
14 for more information.

15 I think that was a more accurate  
16 characterization of his statement of what the FCC is  
17 stating.

18 ALJ REED: Dr. Duncan, did you hear Mr. Faber's  
19 question?

20 If you can respond to it, please do.

21 THE WITNESS: Could I have it repeated, please?

22 MR. FABER: Certainly.

23 Q You have in mind the language I read to you  
24 from the FCC's order?

25 A Yes.

26 Q My question is, given your statements before  
27 about your belief that it's appropriate to submit an  
28 executive summary rather than the data underlying the

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1 study, do you believe that the standard set forth in the  
2 FCC order is not an appropriate standard for a  
3 regulatory body to use in evaluating total factor  
4 productivity studies or X factor recommendations?

5 A I think the regulatory body decides what they  
6 want, and this is exactly what I said. I did say that  
7 if the Commission wanted more, the Commission would ask  
8 for it. So what I believe here the Commission is saying  
9 is, Look, henceforth we would like to have all of this  
10 information.

11 And my view is if that's what they say, then  
12 that's what you provide.

13 You know, let -- all I was saying was it was  
14 my perception that on the average, that Commissions  
15 prefer executive summaries and not the details unless  
16 they ask for it.

17 This Commission apparently has found a reason  
18 to want everything; and, you know, if that's the way  
19 they want it, then that's probably what they're going to  
20 get, piles of computer output and stuff like that. I --  
21 it's a matter of taste more than anything else.

22 I have no opinion as to whether it's right or  
23 wrong; simply, if that's what the rules are, that's what  
24 you do.

25 Q Tell me if you agree with the following  
26 statement:

27 "At a minimum, the productivity  
28 offset, which includes a

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1 productivity factor and a stretch  
2 factor, should be reduced from its  
3 current level by an amount that  
4 reflects the estimated impact of  
5 competition on the earnings of  
6 efficient, aggressive incumbent  
7 suppliers."

8 A Read the qualifications again on that?

9 Q "At a minimum, the productivity  
10 offset, which includes a  
11 productivity factor and a stretch  
12 factor, should be reduced from its  
13 current level by an amount that  
14 reflects the estimated impact of  
15 competition on the earnings of  
16 efficient, aggressive incumbent  
17 suppliers."

18 A Are you applying this to the FCC or here?

19 Q To this proceeding.

20 A To this proceeding.

21 I guess my belief -- I would go further. So I  
22 would just disagree, and I would say you should get rid  
23 of the X factor entirely because as soon as you say  
24 competition, price caps have served their purpose.

25 My view of price caps is they're a transition  
26 to competition. Competition is here, and as soon as  
27 competition is here, you should get rid of the price cap  
28 entirely.

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1           So I would go even further. I would just say  
2 get rid of it.

3           Q   But you would agree, then, that it is the  
4 impact of competition that ought to be taken into  
5 account in eliminating the productivity offset?

6           A   The impact in a --

7           MR. GOLABEK: Your Honor, I'm going to object.  
8 This is going beyond the scope of the testimony that was  
9 offered by Dr. Duncan in this proceeding. I'm objecting  
10 because I think it goes beyond the matters for which  
11 Dr. Duncan was put on the stand for us to hear testimony  
12 about. He's here to testify with regards to the  
13 Christensen study rather than how he perceives the world  
14 post competition.

15          ALJ REED: Objection overruled.

16          THE WITNESS: I'm going to have to ask for the  
17 question again; I'm sorry.

18          MR. FABER: Q The question was, do you believe the  
19 productivity offset ought to be eliminated, as you had  
20 suggested, to reflect the estimated impact of  
21 competition on the earnings of the incumbent LECs?

22          A   I believe it should be eliminated because of  
23 part -- because as soon as you open the markets up to  
24 competition, I believe all bets are off, and you're in a  
25 situation where competition reigns; there's free entry,  
26 and the incumbent is stuck.

27          Q   Let's go back for a moment, Dr. Duncan, to  
28 page 5 of Exhibit 37, your direct testimony.



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1       A    My direct testimony.

2       Q    Look at lines 21 through 24 of that page. Do  
3 you have that in front of you?

4       A    Yes, I do.

5       Q    You make an assertion there that there is no  
6 differential between the input price -- input prices  
7 faced by the local exchange carrier than the input  
8 prices faced by the overall United States economy; is  
9 that right?

10      A    That's correct.

11      Q    That is mainly an empirical question; is that  
12 right?

13      A    That's correct.

14      Q    Putting aside for the moment whether it is  
15 true or not, do you agree that the concept of an input  
16 price differential is a valid concept?

17      A    No.

18      Q    You do not believe that the price-cap formula  
19 should not even consider the possibility that the input  
20 price growth rate for LECs is different from the input  
21 price growth rate for the economy as a whole?

22      A    No.

23      MR. FABER: That's all I have, your Honor.

24            Thank you, Dr. Duncan.

25      ALJ REED: Thank you, Mr. Faber.

26            Dr. Duncan, I just have one question for you.

27                    EXAMINATION

28   BY ALJ REED:

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1           Q    You spent some time discussing with Mr. Faber  
2   page 4 of your reply testimony where you are discussing  
3   some rules regarding the use of structural breaks and  
4   the Bush-Uretsky study?

5           A    Yes.

6           Q    Is it your opinion that Dr. Christensen did  
7   not err by breaking the data at the beginning of NRF?

8           A    I guess I would put that a little  
9   differently. If I'm not answering the question, you can  
10   tell me. His results didn't differ from mine. I did a  
11   different analysis than he did, which contains what he  
12   did as a special case.

13                   And since I didn't find anything that would  
14   convince me that there is any difference in our results,  
15   I didn't go further.

16                   So I wouldn't say whether he erred or not. I  
17   simply would say that we took two different approaches  
18   and came up with results that corroborated one another,  
19   which makes me feel quite a bit more comfortable.

20                   So I don't really have an opinion on whether  
21   that's an error or not.

22                   The result is that neither one of us found a  
23   deviation between these series using different  
24   methodologies.

25           Q    So if you are able to corroborate a study,  
26   then breaking the data isn't necessarily a problem.

27           A    I guess I would have to -- I would really have  
28   to look at the studies. I can see cases in which it --

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1 it would depend on how it was broken.

2 I mean, I could imagine people who want to get  
3 the same result and breaking the data in kind of the  
4 same place using different methodologies and getting the  
5 same -- same sort of results. So you want to guard  
6 against that sort of thing.

7 You really want to have quite different sorts  
8 of methodologies, and I typically don't like to break  
9 data sets. I would prefer to do an analysis where you  
10 look for, like I said, nonstationary or  
11 non-cointegration, which is, There's something wrong  
12 with this process here.

13 And you look to that and it says, There's  
14 something wrong with this process; and you say,  
15 Something's wrong.

16 Then you go in and look to see what's wrong.

17 But none of my diagnostics said there was  
18 anything wrong with the series. The series looks like a  
19 regular, well-behaved, random process with a zero mean.  
20 So I said, Okay, there's nothing that would suggest  
21 otherwise. So to engage in breaking the data at  
22 different places, I wouldn't do.

23 And I'm -- I have to say I'm a little  
24 uncertain about what you're saying about Christensen  
25 breaking the data at NRF. I mean, you can -- his  
26 regression analysis, I don't believe, did that. I'd  
27 need to check. Certainly, my analysis didn't.

28 When you break the data at NRF, as I did in

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1 one of my straw-men examples, you know, you find that in  
2 fact the telecom price index is growing faster than the  
3 U.S. economy since then. But again, you know, I worry  
4 about putting stuff in there. I wouldn't use that  
5 methodology.

6 I wouldn't come to you and say, Look, since  
7 NRF, U.S. Telecom's price index has been going up  
8 faster, and so you should reduce it even more.

9 I just say, Look, these are all consistent  
10 with a random process with a zero mean. You know, it's  
11 like tossing a coin. Every now and then you're going to  
12 get six heads in a row; then you get two tails in a  
13 row. You don't say, Oh, look something's changed. You  
14 say, These things happen.

15 In a random series, these things are going  
16 on. I don't know if I'm being responsive to you or  
17 not. I wouldn't break the data. I wouldn't necessarily  
18 say that somebody else who breaks it erred. I wouldn't  
19 break it.

20 ALJ REED: Okay. Thank you.

21 Mr. Golabek, did you have any redirect?

22 MR. GOLABEK: Yeah, I just have one redirect  
23 question, your Honor.

24 REDIRECT EXAMINATION

25 BY MR. GOLABEK:

26 Q Dr. Duncan, during your cross-examination by  
27 Mr. Faber, he asked you about a particular footnote in a  
28 text, I believe, by Walter Nickelson, and that footnote

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1     stated that:

2             "Capital and labor inputs are  
3             assumed to be homogeneous. This is  
4             a great simplification since there  
5             are, in reality, numerous kinds of  
6             labor and many types of machines.  
7             The recognition that these inputs  
8             are in fact inhomogeneous raises  
9             many technical problems in the  
10            theory of aggregation."

11           And he asked you if you agreed with that, and  
12     you said no you didn't agree with it. And then you  
13     offered to tell us why.

14           Can you tell us why at this point?

15     A     Yes. When one does theory, one makes  
16     assumptions that are valid and make the analysis  
17     easier. So you want to do both things.

18           Assuming inhomogeneous inputs -- that is,  
19     inputs that aren't the same -- it just makes life very  
20     difficult, and it's not necessary. And so the whole  
21     point is, it's not necessary to assume inhomogeneous.  
22     If you do, you just make life terribly, terribly  
23     difficult for you.

24           It's not a simplification in a sense that we  
25     are ignoring some feature of the economy, that we're  
26     simplifying something away and making things less real.  
27     We're saying, Look, we're just organizing things so it's  
28     easier for us to work on this without giving up any of

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1 the reality.

2 And so when I said the simplification -- when  
3 I disagreed with that, I wanted to make it clear that  
4 it's -- it's a way of thinking about things that doesn't  
5 detract from reality at all, just making sure you put  
6 things in the right box so then it's easy to talk  
7 about. So that's why I disagree.

8 MR. GOLABEK: That's all I have, your Honor.

9 ALJ REED: Thank you, Mr. Faber.

10 MR. FABER: Real briefly.

11 RECROSS-EXAMINATION

12 BY MR. FABER:

13 Q Dr. Duncan, you just said assuming  
14 inhomogeneous is not difficult -- is difficult and not  
15 necessary.

16 I was asking you before about the term  
17 nonhomogeneous inputs, and you tried to define it as  
18 inputs that are different.

19 A That's correct.

20 Q And are you using the word inhomogeneous as  
21 Nickelson does, in the same way?

22 A Yeah, inhomogeneous and nonhomogeneous. I'm  
23 using in the same way that basically you mean inputs  
24 that are not identical and that you want to somehow give  
25 them the same label.

26 Q Thank you.

27 A And I just say, you know, that's not the  
28 definition of an input. And when people have tried to,

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1     you know, say, Well, you know, labor isn't homogeneous  
2     because people are different. All right, it turns out  
3     that's an error because it isn't -- it isn't the person  
4     that's the input, it's the job that's the input. And a  
5     person fills the job.

6             And so I'd like to give the example of  
7     McDonald's, okay, somebody working in McDonald's, any of  
8     us in this room or high school students that work in  
9     McDonald's.

10            McDonald's jobs of a given type are the same.  
11     The people in the jobs are different, but the job's the  
12     same, and it gets paid the same, and it doesn't really  
13     matter whether you're in it, or I'm in it, or our sons  
14     or daughters are in it. Presumably, that job gets done  
15     the same way regardless of who's in it, you know, up to  
16     some level.

17            If they don't do the job, they get fired. So  
18     the job is what the input is, and that job is  
19     homogeneous. And that's the sense in which economists  
20     look at these things.

21            Q     Is labor used by McDonald's and labor used by  
22     the LEC industry, for example, homogeneous as an  
23     entity?

24            A     The labor or the labor input?

25            Q     The labor input.

26            A     No, they're different -- well, it depends. I  
27     mean, I -- I am 99 percent sure the people who work in  
28     our cafeteria are doing the same job that people in

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1 McDonald's do. So I would say that for input, the labor  
2 is homogeneous.

3 Q But not for the people working in McDonald's  
4 versus the people laying fiberoptics for GTE California,  
5 certainly.

6 A Not people; the jobs. The jobs are different  
7 jobs.

8 Q And they're not -- and the labor input to  
9 those jobs is not homogeneous, is it?

10 A Well, the job is a different job. I think of  
11 the input as the job, okay? So it's the number of hours  
12 of a person laying fiber in a particular way. That's  
13 what the job is, okay? And that's what the input is,  
14 and that's homogeneous.

15 Now, I can do that, or you can do that, or  
16 somebody else can do that, and the people in there may  
17 have different abilities, different capabilities. And  
18 we assume that people who can't do it are -- don't get  
19 those jobs, and people who can do it can differ in lots  
20 of ways as human beings. But the job -- and that's  
21 what's relevant to determining productivity -- the job  
22 itself is identical.

23 So fiber laying jobs are identical.

24 MR. FABER: Okay. Thank you.

25 ALJ REED: Mr. Golabek.

26 MR. GOLABEK: Yeah, nothing further.

27 At this point I would like to move the  
28 testimony previously marked as Exhibits 37 and 38 into



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1 the record.

2 ALJ REED: Any objection?

3 (No Response)

4 ALJ REED: Exhibits 37 through 38 are received into  
5 evidence.

6 (Exhibit Nos. 37 and 38 were  
7 received into evidence.)

8 MR. FABER: Your Honor, I move for the admission of  
9 Exhibits 39 and 40.

10 ALJ REED: Any objection?

11 (No Response)

12 ALJ REED: Exhibits 39 and 40 are received into  
13 evidence.

14 (Exhibit Nos. 39 and 40 were  
15 received into evidence.)

16 MR. FABER: Thank you.

17 ALJ REED: Thank you, Dr. Duncan; you're excused.

18 Off the record.

19 (Off the record) ]

20 ALJ REED: On the record.

21 DENNIS W. EVANS

22 resumed the stand and testified further as follows:

23 ALJ REED: Ms. Burdick?

24 CROSS-EXAMINATION

25 BY MS. BURDICK:

26 Q Good morning, Mr. Evans.

27 I'm Lee Burdick. I represent the California

28 Cable Television Association.